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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,132	03/15/2005	Josef Esser	(2086/42184)Case 1960 7-PCT-US	
7590 05/01/2006			EXAMINER	
Trexler Bushnell Giangiorgi Blackstone & Marr			MITCHELL, KATHERINE W	
105 West Adams Street Chicago, IL 60603			ART UNIT	PAPER NUMBER
J			3677	
			DATE MAILED: 05/01/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/511,132	ESSER, JOSEF	
Office Action Summary	Examiner	Art Unit	
	Katherine W. Mitchell	3677	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEL	i. ely filed the mailing date of this communication. O (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on <u>22 Ar</u> This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro		
Disposition of Claims			
4)  Claim(s) 8-10 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5)  Claim(s) is/are allowed.  6)  Claim(s) 8-10 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on 12/13/2004 is/are: a)  Applicant may not request that any objection to the or  Replacement drawing sheet(s) including the correction  11) The oath or declaration is objected to by the Examiner	accepted or b)⊠ objected to by drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/13/2004.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P. 6) Other:		

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#### **DETAILED ACTION**

The Request for Corrected Filing Receipt was noted by examiner. The priority to application GERMANY 202 06 373.9 23/04/2002 is noted, as provided 4/22/2005. However, an intervening reference may be applied unless a certified translation of the priority document is also provided.

## Specification

1. The abstract of the disclosure is objected to because of the implied phrse "Disclosed is" and the use of legalese "said" and "means". Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

# **Drawings**

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- 3. The drawings are objected to because Fig 2 appears to be cut off in the lower right corner. It also appears to be missing in the published PCT. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the screw, the nut, the surfaces of the first member, "the shim only in its exterior marginal area is cambered in the radial direction while it is flat in the interior" must be shown or the feature(s) canceled from the claim(s). It appears that the camber is in the axial direction-- i.e., the

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bend is angled in the axial direction. Examiner is not sure "cambered" is the best choice of words to describe shape of the shim in Fig 2. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claim 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 8 is very unclear as to what is being claimed. Applicant claims a fastening Device, provided with a washer, but the limitations are directed to the washer. If the washer is necessarily part of the fastening device, then the fastening device --further comprises-- a washer. If something "A" is provided to something else "B", "A" is not part of "B". Since the claim makes no sense unless the washer is part of the fastening device, examiner assumes the fastening device further comprises a washer.

Claim 8 recites "the shim" in the last word of claim 8. There is insufficient antecedent basis for this limitation in the claim. Is the shim the same as the washer? Further, what is "the half" in the next to last line of the claim? Examiner does not understand what is being described by "extending over the half up to two thirds of the radial width of the shim". Assuming "the half" refers to the surface of the shim, where is the width measured from - the axis, or the inner wall of the borehole, or the outer edge of the washer/shim? Examiner cannot follow this limitation and is ignoring everything after "the exterior margin" in line 11.

Claim 8 claims "the two surfaces thereof". There is insufficient antecedent basis for this limitation in the claim. Examiner assumes applicant means two surfaces of the washer, which has four surfaces (convex surface, concave surface, outer wall connecting the concave & convex surfaces, and inner wall at the borehole). Note that applicant has surfaces, and then sides -- are sides the same as surfaces, and if so, which two sides/surfaces are being claimed? Examiner assumes any two surfaces/sides.

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Claim 8 does not positive require that the fastener is cambered, but the recites structure that is cambered. Note that "is configured in such a manner that it CAN BE compressed …by being cambered" does not positively require a cambered structure. Further, even if cambered were positively claimed, cambered does not require a concave side and a convex side, so there is insufficient antecedent basis for this limitation in the claim.

Claim 8 line 4 discloses "rib profiles" without further description, then line 9 discloses "rib profiles" on a screw-facing surface, and line 11 it is assumed rib profiles on a member-facing surface are disclosed. Then line 12 recites "the rib profiles" each are extending over the half up to two thirds… Do each of the rib profiles extend over the same half?

There is some wording missing in line 11 of line 8. From lines 9 to 11, there is an --are positioned-- missing in line 11 or examiner does not understand what is being claimed.

Claims 9-10 are rejected as depending from claim 8.

Claim 9 recites cambered in the radial direction. It appears to examiner that it is cambered in the axial direction - i.e., the shim has its exterior marginal area bent or arched such that the bend extends in an axial direction.

Claim 9 recites the limitation "the interior" in line 2. There is insufficient antecedent basis for this limitation in the claim. Is the interior the same as the inner are close to the bore hole? Also in claim 9, applicant has "its exterior marginal area is cambered in the radial direction while it is flat in the interior" which indicates that

applicant intends "cambered" as the opposite of, or mutually exclusive with, "flat". Flat can mean smooth, not just non-angled with respect to a particular plane or line, and applicant's Fig 1, for example, can read on claim 9.

Claim 10 is rejected as depending on claim 9.

Claim 10 is completely not understood. Examiner is guessing, and assuming, applicant is claiming that the entire shim (washer??) is cambered. Again, examiner does not know what is the half width or the shim, per above.

# Claim Objections

7. Claim 10 is objected to because of the following informalities: The word "only" seems confusing in claim 10. Also, why is the wording "its" inner bore hole, but "the" exterior margin. Similarly, in claim 9, "only" does not seem to grammatically belong where it is in the claim. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Castel USP 3332464.

AS BEST UNDERSTOOD, per above,

Re claim 8-10: Castel teaches a self locking fastener device comprising:

A screw or nut 16

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• A washer 10 with central bore hole (at 11) which on 2 surfaces is provided with rib profiles (note that rib profiles are formed on upper surfaces, per Fig 2, and at inner bore surface 11, per Fig 3). These rib profiles are CAPABLE OF being fixed to [respective] surfaces of the first member and the screw or nut on or before the time the fastener is tightened.

The device is configured in a manner that it can be compressed counter to its resilience by being cambered.

There is a convex side and a concave side.

Rib profiles 15 on a surface capable of facing a screw or nut are positioned in the inner area close to the bore hole, and rib profiles 18 on a side capable of facing the member [are positioned] in the exterior area close to the exterior margin.

Further Re claim 9: Fig 6 shows the shim (washer?) having a non-cambered or non-convex, ie, planar, surface at 43, and a cambered or non-planar surface as the annular surface 44. However, Fig 3 can also be considered to show an exterior marginal area that is cambered (at 14), with a flat interior (surface inner portion 13).

Further Re claim 10: Fig 3 shows the shim/washer with only a cambered area-i.e., no planar annular surface.

10. Claims 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Olson USP 1911384.

AS BEST UNDERSTOOD, per above,

Re claim 8-9: Olson teaches a self locking fastener device comprising:

A screw or nut 30

• A washer 12 with central bore hole (at 18) which on 2 surfaces is provided with rib profiles (note that rib profiles 18 are formed on upper and lower surfaces of flat surfaces, per Fig 4, and at inner bore surface, per Fig 4). These rib profiles are CAPABLE OF being fixed to [respective] surfaces of the first member and the screw or nut on or before the time the fastener is tightened.

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The device is configured in a manner that it can be compressed counter to its resilience by being cambered.

There is a convex side and a concave side.

Rib profiles 18 on a surface capable of facing a screw or nut are positioned in the inner area close to the bore hole, and rib profiles 20 on a side capable of facing the member [are positioned] in the exterior area close to the exterior margin (Fig 4).

Further Re claim 9: Fig 4 shows the shim (washer?) having a non-cambered or non-convex, ie, planar, surface (around 14 in Fig 4), and a cambered or non-planar surface as the annular surface (near arrow 16 in Fig 4 - note that Fig 9 shows the washer of Fig 4 and clearly has a flat and cambered portion).

#### Conclusion

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon Thurs 10 AM 8 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell Primary Examiner Art Unit 3677

Mukhelf

Kwm 4/26/2006